
BioMax Environmental
Environmental Consulting and Industrial Hygiene Services

October 28th, 2008

Mr. Doug Button
Deputy Director
Real Estate Services Division
707 Third Street - 8th Floor
West Sacramento, CA 95605

Post Inspection Clearance Assessment Report
Department of General Services
LaCroix Davis Investigative Areas – 22nd Floor
Board of Equalization Building, 450 N. Street
Sacramento, California

Mr. Button,

BioMax Environmental, LLC (BioMax) is pleased to provide The Department of General Services (DGS) with this letter summary report detailing BioMax's findings and recommendations pertaining to our post inspection clearance assessment services performed within the 22nd Floor interior wall areas within the Board of Equalization (BOE) building located at 450 N Street, Sacramento, California. BioMax understands that these post inspection clearance assessment services were contracted with BioMax, at your request, in an effort to review and verify the successful completion of investigative efforts and repair performed by LaCroix Davis (LCD) and JLS Environmental, Inc., (JLS), respectively, within the identified 22nd floor interior wall cavity areas.

Therefore, these post inspection clearance assessment services are intended to assess the current site conditions wherein investigative deconstruction and sampling activities were performed by LCD under containment barrier controls and immediate repairs completed by JLS. BioMax understands that such areas were investigated by LCD in an effort to visually identify and assess the potential for moisture intrusion and resultant microbial related damages within the noted interior cavities. Procedural recommendations prepared by BioMax pertaining to such activities were developed, distributed, and approved by DGS and BOE representatives as summarized in BioMax's summary report entitled **Containment and Clearance Procedures during Wall Cavity Inspection, dated October 10th, 2008.**

Additional historical reports and assessment data may also be obtained for further background and technical reference, as necessary.

Hence, these post inspection clearance assessment services, thereby, are intended to provide a professional evaluation verifying the physical conditions wherein the successful completion of noted LCD activities, JLS repair, and clean-up measures have been performed within each of the containment areas noted below. Following the completion of these prescribed activities, Mr. Michael A. Polkabila, CIH, REA of BioMax performed a detailed area inspection and air sampling assessment within each of the noted interior containment areas and adjacent interior areas as noted. BioMax's findings and conclusions pertaining to these inspection and clearance sampling assessment activities are summarized herein.

SITE OBSERVATIONS

Due to the varying completion status of the noted LCD containment areas, site inspection and assessment sampling activities were performed within the noted containment areas on October 13th, and 20th, 2008. Site access into each of these contained areas was facilitated by site contractor JLS personnel. On the noted dates, Mr. Michael A. Polkabila, CIH, REA of BioMax performed a detailed visual site inspection within the available containment system barriers wherein a detailed visual assessment and confirmatory sampling activities were performed as noted below.

On-site inspection and clearance sampling assessment activities were performed by Mr. Michael A. Polkabila, CIH, REA, of BioMax in accordance with currently recognized microbial assessment and sampling guideline procedures. Mr. Polkabila has been certified in the Comprehensive Practice of Industrial Hygiene by the American Board of Industrial Hygiene and holds the right to the designation "Certified Industrial Hygienist" (CIH) under certification number CP 7104. Mr. Polkabila is also certified by the California Environmental Protection Agency (Cal/EPA) as a Class I Registered Environmental Assessor (REA) under Cal/EPA certification number 05011. Previously established clearance criteria developed for the building investigative activities has been formalized in BioMax's Post Mitigation Clearance Assessment Protocols dated February 15th, 2008. Such protocols have been reviewed and approved by BOE's environmental consultant, Hygientech International, Inc. (HTI) prior to implementation. A summary of significant notations and observations gathered during BioMax's site inspection and clearance assessment activities within the subject containment areas are compiled as follows:

1. At the time of our preliminary site inspection and clearance sampling assessment performed on October 13th, 2008 ambient outdoor conditions both prior to and following our interior assessment activities consisted of clear and cool conditions with an outdoor temperatures range between 49 and 51 degrees F and relative humidity of 28 and 27 %, respectively. Predominant winds were noted at approximately 0-5 knots from the north westerly direction at the time of our assessment. Interior environmental conditions within the sampled containment areas consisted of a temperature range between 72 and 84 degrees F with relative humidity of 22 to 24 percent.
2. At the time of BioMax's follow-up site inspection and clearance sampling assessment performed on October 20th, 2008 ambient outdoor conditions both prior to and following our

interior assessment activities consisted of clear and cool conditions with an outdoor temperatures range between 59 and 63 degrees F and relative humidity range of 30 and 31 %, respectively. Predominant winds were noted at approximately 0-5 knots from the north westerly direction at the time of our assessment. Interior environmental conditions within the sampled containment areas consisted of a temperature range between 77 and 78 degrees F with relative humidity of 27 to 28 percent.

3. At the time of each of these assessment activities, each of the observed interior containment barrier systems, whereby destructive inspection and repair activities were performed, were established and maintained within the noted areas as per BioMax's protocols. Specific detail as noted on the "as built" construction site floor diagram documents may be reviewed for further reference as necessary. BioMax also performed prior inspections and review of records/conditions within and surrounding each of the noted containment areas during the noted investigative activities. A review of such information and physical pressure differential records has indicated a preponderance of evidence verifying that the current barrier systems have provided appropriate protective controls for the duration and performance of the noted investigative activities.
4. During the performance of our post inspection assessment within each containment system, BioMax noted the absence of visible evidence of elevated particulate debris and/or residues remaining within each of the noted containment system barriers. BioMax also noted the completion of physical wall penetration and/or removal repair as evidenced by the visual repair patches and recent re-sheet rocking of exposed wallboard materials. BioMax understands that DGS had been provided specific procedural repair requirements and wall repair procedural detail as part of the implementation of these activities. Any further detail regarding these repair procedures may be obtained through review of these referenced requirements provided by the local fire marshal authority, as necessary
5. The establishment of containment system barriers encompassing each of the interior affected areas were observed and verified under appropriate posting and negative pressure differential at the time of this post mitigation assessment. Worker and equipment entry and exit chambers comprised of a series of zippered plastic access doorways were also observed attached to the noted containment barriers consistent with BioMax's previously noted mitigation protocols.
6. As verified during these assessment activities, all identified interior wallboard building materials had been removed and repaired within each of the noted interior areas of investigation at the time of BioMax's clearance assessment. Digital images and schematic records have been developed and maintained by LCD and JLS for the duration the performance of these investigative inspection and removal activities. Such records have been reviewed by BioMax as part of this clearance assessment and may be provided by LCD and JLS for additional review upon request.
7. Following the completion of visual inspections within each of these containment areas, BioMax collected series airborne samples within and outside the noted containment systems

noted below for subsequent comparative analysis. Such samples collected within and surrounding each the interior containment system were performed in an effort to identify and quantify the presence of potential airborne mold spores present within (and surrounding) the containment systems following the completion of the prescribed investigative effort. Findings associated with these verification sampling activities are noted below.

8. BioMax also collected a series of digital images during these post inspection assessment activities to document the conditions and significant site observations gathered at this time. Such images are provided as an attachment to this summary report for further reference, as necessary.

SAMPLING PROCEDURES

On-site inspection and sampling assessment activities were conducted by Mr. Michael A. Polkaba, CIH, REA, of BioMax Environmental within the noted LCD containment areas on October 13th and 20th, 2008. All sampling equipment, supplies, calibration materials, and collection media were provided and maintained by BioMax as part of the performance of this scope of work. Sample collection procedures and methods were performed using standard industrial hygiene sampling methods following techniques prescribed by the contracted analytical laboratory.

Spore Trap Airborne Microbial and Particulate Sampling:

The collection of airborne Spore Trap microbial samples was achieved using Zefon Air-O-Cell sampling cassette collection devices placed in each of the areas identified in the tables below. Airborne Spore Trap samples were collected within and outside each of the containment area locations at a height of approximately four feet above ground level using a tripod mounted Quick Take 15 air sampling pump manufactured by SKC. Samples were collected at a calibrated flow rate of 15 liters per minute for a total of five minutes per sample. Resultant total sample volumes, therefore, corresponded to 75 liters collected for each collected sample. Field calibration of the SKC air sampling pump was conducted using a field rotometer device calibrated with a Bios Drycal primary standard flow meter. All spore trap air sampling and analytical procedures were performed in accordance with prescribed manufacturer guidelines as well as applicable professional certified industrial hygiene indoor air quality microbial investigation procedures and certified industrial hygiene practices.

Additional exterior ambient samples were also similarly collected and analyzed before and after the interior assessment in an effort to identify and quantify representative background microbial taxa (types), rank order, and corresponding airborne spore levels present within the ambient environment at the time of this assessment for comparative purposes. Sampling collection activities performed on October 13th, 2008 during this study included the collection of identifiable airborne microbial contaminants within the representative area locations noted in Table 1:

Table 1. Airborne Spore Trap Sampling Locations performed on 10/13/08:

Air Sample Number	Spore Trap Air Sampling Location
14226771	Ambient Post Sample at 23 rd Floor West Balcony
14226772	Hallway near Men's Restroom (LCD-C-10) Containment
14226840	LCD-C-10 Containment
14226728	LCD-C-9 Containment
14224986	LCD-C-8 Containment
14226693	LCD-C-1 Containment
14226592	Hallway near LCD-C-2 Containment
14226775	LCD-C-2 Containment
14226829	LCD-C-3 Containment
14226699	LCD-C-4 Containment
14226858	LCD-C-5 Containment
14226788	LCD-C-11 (Sample Aborted)
14226827	Ambient 23 rd Floor West Balcony

Sampling collection activities performed on October 20th, 2008 as part of this study included the collection of identifiable airborne microbial contaminants within the representative area locations noted in Table 2:

Table 2. Airborne Spore Trap Sampling Locations performed on 10/20/08:

Air Sample Number	Spore Trap Air Sampling Location
14226686	Ambient Post Sample at 3 rd Level of Parking Garage
14226756	Hallway near LCD-C-11 Containment
14226805	LCD-C-11 Containment (re-test)
14226767	Hallway near LCD-C-6 Containment
14226803	LCD-C-6 Containment

Air Sample Number	Spore Trap Air Sampling Location
14226796	LCD-C-7 Containment
14226768	Ambient Front Entry of Building

At the conclusion of sampling activities, preparation and shipping of the collected samples were accomplished in accordance with standard industrial hygiene chain of custody (COC) documentation procedures and quality assurance/quality control practices. Once collected, labeled, and recorded, all samples were double sealed within airtight plastic Ziploc shipping containers and transported via Federal Express Priority Mail to Environmental Microbial Laboratories (EMLabs) in San Bruno, California for microbial analysis. EMLabs holds current applicable analytical accreditation and specializes in microbial analytical procedures. Sampling and chain of custody records are provided as an attachment to this letter report for further reference.

ANALYTICAL FINDINGS AND CONCLUSIONS

Airborne Spore Trap Findings LCD Containments Relative to 10/13/08:

Laboratory analytical methods for the identification and enumeration of microbial (mold) taxa and particulate contaminants were conducted in accordance with prescribed analytical procedures and quality control/assurance measures. Original laboratory results including the enumeration of recognizable microbial spore and particulate types are also attached to this letter report for further reference and detail. A summary of airborne Spore Trap microbial (mold) and particulate findings pertaining to each of the subject areas are presented in Table 3 below:

Table 3. Airborne Microbial and Particulate Findings – 10/13/08

Location Desc.	Total Mold Spores (CFU/m ³)	Background Debris (scale of 1-4)	Skin Cell Fragments (scale of 1-4)	Hypha Fragments (units/m ³)
Ambient Post Sample at 23 rd Floor West Balcony	2,800	3+	<1+	40
Hallway near Men's Restroom (LCD-C-10) Containment	53	2+	1+	<13
LCD-C-10 Containment	240	2+	2+	13

Location Desc	Total Mold Spores (Cts/m3)	Background Debris (scale of 1-4)	Spore Cell Fragments (scale of 1-4)	Hypa Fragments (units/m3)
LCD-C-9 Containment	330	2+	2+	<13
LCD-C-8 Containment	170	2+	1+	<13
LCD-C-1 Containment	<13	2+	1+	<13
Hallway near LCD-C-2 Containment	67	2+	1+	<13
LCD-C-2 Containment	150	2+	1+	40
LCD-C-3 Containment	<13	2+	1+	<13
LCD-C-4 Containment	120	3+	1+	<13
LCD-C-5 Containment	<13	2+	1+	<13
LCD-C-11 (Sample Aborted)	53	2+	1+	<13
Ambient 23 rd Floor West Balcony	10,000	3+	<1+	130

Airborne Spore Trap Findings LCD Containments Relative to 10/20/08:

Laboratory analytical methods for the identification and enumeration of microbial (mold) taxa and particulate contaminants were conducted in accordance with prescribed analytical procedures and quality control/assurance measures. Original laboratory results including the enumeration of recognizable microbial spore and particulate types are also attached to this letter report for further reference and detail. A summary of airborne Spore Trap microbial (mold) and particulate findings pertaining to each of the subject areas are presented in Table 4 below:

Table 4. Airborne Microbial and Particulate Findings – 10/20/08

Location Desc	Total Mold Spores (Ct/m ³)	Background Debris (scale of 1-4)	Skin/Cell Fragments (scale of 1-4)	Hyphal Fragments (units/ml)
Ambient Post Sample at 3 rd Level of Parking Garage	690	3+	<1+	<13
Hallway near LCD-C-11 Containment	430	3+	1+	<13
LCD-C-11 Containment (re-test)	570	4+	None	<13
Hallway near LCD-C-6 Containment	440	4+	None	<13
LCD-C-6 Containment	110	3+	None	<13
LCD-C-7 Containment	110	3+	None	<13
Ambient Front Entry of Building	5,900	4+	<1+	40

The analytical findings presented in Tables 3 and 4 above clearly indicate the presence of significantly lower concentrations of total microbial (mold) spores measured within each of the interior samples collected both within and surrounding the subject LCD containment barriers when compared to the levels currently measured within the samples collected from the corresponding ambient outside environment. Analytical findings also indicate similar fungal taxa distribution (mold types) and rank order (predominant taxa) of molds identified within the mitigated areas as well as the adjacent hallway areas sampled (area noted as "Hallway" outside containment). Analysis of fungal hyphal fragments (vegetative fungal growth structures) also indicated fewer structures within the interior containment areas and adjacent interior spaces when compared to the corresponding levels found within the ambient outside environmental samples. Particularly worthy of note, was the absence of elevated levels of hydrophilic (moisture loving) mold taxa following the performance of mitigative activities within each of the noted LCD containment barrier areas.

Although there are currently no regulatory standards or limits pertaining to allowable airborne fungal concentrations (for any mold taxa) present in indoor environments, there is a general

consensus among indoor air quality experts that airborne microbial contamination found within "acceptable" living and working spaces are generally similar in kind and present at levels which are below those found in the corresponding native outside environment. BioMax believes that the absence of physical debris resultant from the destructive inspection and repair activities noted and relatively fewer total airborne mold levels with typical taxa and rank order distribution following repair and clean-up activities are consistent with these generally acceptable interior working space conditions. BioMax, therefore, believes that these findings provide reasonable evidence indicating that current destructive inspection, repair, and clean-up measures have successfully contained potential fugitive mold spore and particulate transmission within the above noted containment areas to normal representative levels.

Based on these findings, BioMax believes that the current physical site conditions present within each of these investigated areas may be considered acceptable in meeting both the visual and agreed upon analytical clearance criteria established for these activities. As such, BioMax's review and interpretation of the collected analytical data associated with each of the noted containment areas has been shown to meet the previously referenced clearance criteria established within the BOE building. Such clearance criteria has been presented in BioMax's Post Mitigation Clearance Assessment Protocols dated February 15th, 2008, and has been reviewed and approved by BOE's environmental consultant, HTI. Therefore, BioMax believes that the verified achievement of such criteria supports BioMax's determination and conclusion that the noted LCD inspection containment areas may be considered acceptable for reconstruction at this time.

Airborne Particulate Findings:

Analytical particulate findings also sampled and analyzed as part of this assessment identified, what BioMax believes to be, "unremarkable" levels present within the collected air samples. Such findings within and surrounding the noted containment areas also provide reasonable evidence indicating that current particulate clean-up and mitigative control measures have successfully controlled and contained particulate debris within the identified containment areas to acceptable post mitigation clean-up levels.

RECOMMENDATIONS

Based on BioMax's post mitigation assessment findings and conclusions presented in this report, BioMax believes that the current airborne microbial levels sampled and analyzed from within the noted LCD investigative containment structures provides no significant evidence of elevated debris and/or residual microbial contamination through airborne contamination/migration following the completion of the prescribed investigative, repair, and clean-up measures.

Hence, based on current site observations, field measurements, and review of all available findings at this time, BioMax believes that the investigated LCD containment areas may be considered acceptable for general reconstruction following prudent reconstruction practices.

Therefore, based on our professional review and interpretation of these current referenced findings, BioMax provides the following recommendations for consideration as discussed below:

1. BioMax believes that current airborne microbial (mold) levels and mold taxa (types) identified within and surrounding the LCD containment structures are currently consistent with generally acceptable conditions and industry standard parameters following the performance of investigative, repair, and clean-up activities noted. Hence, BioMax recommends that no further airborne microbial sampling activities are warranted within these specific noted containment areas at this time, and that the containment systems may be deactivated to allow or forthcoming inspection and reconstruction.
2. Reasonable additional assessment and investigative measures may also be required upon the identification of new or previously undiscovered materials and/or information related to moisture/microbial impacts within the noted structures and/or areas, as necessary. Any occurrence and/or re-occurrence of moisture intrusion following reconstruction within these areas should also be reviewed and addressed through additional professional consultation, as necessary. BioMax is certainly prepared to provide such professional consultation pertaining to these and any follow-up investigative measures upon request.

BioMax believes that the conclusions and recommendations provided above are consistent with DGS's requested scope of work as relative with standard industry microbial investigative, assessment, and control practices. Please do not hesitate to contact me directly at (510) 724-3100 if you have any questions, comments, and/or require further assistance regarding this subject matter.

Sincerely,

Michael A. Polkabl, CIH, REA
Vice President, Principal

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LIMITATIONS

Please note that the professional opinions presented in this review are intended for the sole use of the California State Department of General Services (DGS) and their designated beneficiaries. No other party should rely on the information contained herein without the prior written consent of BioMax Environmental and DGS. The professional opinions provided herein are based on BioMax's review and understanding of current site information and observed site conditions present within the areas inspected at the time these services were performed. Professional recommendations provided as part of this limited scope of work are intended for client consideration only and are not intended as a professional or regulatory mandate. Implementation of any of the above measures or recommendations does not, in any way, warrant the day-to-day health and/or safety of building occupants, residents, site workers, nor regulatory or building code compliance status during normal and changing environmental conditions. As microbial contamination, by nature, may change over time due to additional moisture intrusion, favorable growth conditions, and changing environments, the findings of this report are subject to change in the event that such conditions and/or environments arise. Also, the professional opinions expressed here are subject to revision in the event that new or previously undiscovered information is obtained or uncovered.

The information contained in this and any other applicable communication is for consideration purposes only. It is not intended, nor should it be construed as providing legal advice or warranting any level of safety or regulatory compliance. The sole purpose of such information is to assist with the anticipation, identification, evaluation and control of elevated and/or unnecessary health of physical hazards. Any action taken based on this information, including but not limited to opinions, suggestions and recommendations, whether implied or expressed, is the sole responsibility of the individual taking the action. The management of acceptable health and safety is criteria dependent and situation specific in nature, therefore requiring extensive knowledge and prudent value assessments so as to be properly determined and maintained.

These services were performed by BioMax in accordance with generally accepted professional industrial hygiene principals, practices, and standards of care. Under the existing Industrial Hygiene Definition and Registration Act, all reports, opinions or official documents prepared by a Certified Industrial Hygienist (CIH) constitutes an expression of professional opinion regarding those facts or findings which are subject of a certification and does not constitute a warranty or guarantee, either expressed or implied.

**EMLab P&K**

Report for:

Mr. Michael Polkabia
Biomax Environmental
775 San Pablo Ave.
Pinole, CA 94564

Regarding: **Project: 102008-01**
 EML ID: 479931

Approved by:

Dates of Analysis:
Spore trap analysis: 10-21-2008

Lab Manager
Dr. Kamashwaran Ramanathan

Project SOPs: Spore trap analysis (I100000)

This coversheet is included with your report in order to comply with AIHA and ISO accreditation requirements.

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

EMLab P&K

1150 Bayhill Drive, Suite 100, San Bruno, CA 94066
(650) 829-5800 Fax (650) 829-5852 www.emlab.com

Client: Biomax Environmental
C/O: Mr. Michael Polkabila
Re: 102008-01

Date of Sampling: 10-20-2008
Date of Receipt: 10-21-2008
Date of Report: 10-21-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	14226686: Parking garage 2rd level perimeter		14226756: LCD-C-11 hallway (O.C.)		14226805: LCD-C-11 containment		14226767: LCD-C-6 hallway (O.C.)	
Comments (see below)	None		None		None		None	
Lab ID-Version†:	2119310-1		2119311-1		2119312-1		2119313-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
<i>Alternaria</i>								
<i>Arthrinium</i>								
Ascospores*	4	210						
<i>Aureobasidium</i>								
Basidiospores*	3	160	1	53				
<i>Bipolaris/Drechslera</i> group								
<i>Botrytis</i>								
<i>Chaetomium</i>					1	13		
<i>Cladosporium</i>	6	320	7	370	5	560	4	440
<i>Curvularia</i>								
<i>Epicoccum</i>								
<i>Fusarium</i>								
<i>Myrothecium</i>								
<i>Nigrospora</i>								
Other colorless								
<i>Penicillium/Aspergillus</i> types†								
<i>Pithomyces</i>								
Rusts*								
Smuts*, <i>Periconia</i> , <i>Myxomycetes</i> *								
<i>Stachybotrys</i>								
<i>Stemphylium</i>								
<i>Torula</i>								
<i>Ulocladium</i>								
<i>Zygomycetes</i>								
Background debris (1-4+)††	3+		3+		4+		4+	
Hyphal fragments/m3	< 13		< 13		< 13		< 13	
Pollen/m3	< 13		< 13		< 13		< 13	
Skin cells (1-4+)	< 1+		1+		None		None	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORE/m3		690		430		570		440

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for sample volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

‡ A "Version" greater than 1 indicates amended data.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.

TestAmerica Environmental Microbiology Laboratory, Inc.

EMLab P&K

1150 Bayhill Drive, Suite 100, San Bruno, CA 94066
(650) 829-5800 Fax (650) 829-5852 www.emlab.com

Client: Biomax Environmental
C/O: Mr. Michael Polkabila
Re: 102008-01

Date of Sampling: 10-20-2008
Date of Receipt: 10-21-2008
Date of Report: 10-21-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	14226803: LCD-C-6 containment		14226796: LCD-C-7 containment		14226768: Ambient front entry	
Comments (see below)	None		None		None	
Lab ID-Version†:	2119314-1		2119315-1		2119316-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
Alternaria					1	13
Arthrimum						
Ascospores*						
Aureobasidium						
Basidiospores*					3	330
Bipolaris/Drechslera group						
Botrytis						
Chaetomium					3	40
Cladosporium	2	110	1	110	30	3,300
Curvularia						
Epicoccum						
Fusarium						
Myrothecium						
Nigrospora						
Other colorless						
Penicillium/Aspergillus types†					19	2,100
Pithomyces						
Rusts*					2	27
Smuts*, Periconia, Myxomycetes*					2	27
Stachybotrys						
Stemphylium						
Torula						
Ulocladium						
Zygomycetes						
Background debris (1-4+)††	3+		4+		4+	
Hyphal fragments/m3	< 13		< 13		40	
Pollen/m3	< 13		< 13		< 13	
Skin cells (1-4+)	None		None		< 1+	
Sample volume (liters)	75		75		75	
§ TOTAL SPORE/m3		110		110		5,900

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

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‡ A "Version" greater than 1 indicates amended data.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

EMLab P&K

1150 Bayhill Drive, Suite 100, San Bruno, CA 94066
(650) 829-5800 Fax (650) 829-5852 www.emlab.com

Client: Biomax Environmental
C/O: Mr. Michael Polkabl
Re: 102008-01

Date of Sampling: 10-20-2008
Date of Receipt: 10-21-2008
Date of Report: 10-21-2008

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 14226768, Ambient front entry**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: October				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	13	7	40	450	62	7	27	210	58
Bipolaris/Drechslera group	-	7	13	210	23	7	13	120	13
Chaetomium	40	7	13	130	14	7	13	120	19
Cladosporium	3,300	53	800	12,000	97	53	640	6,400	98
Curvularia	-	7	27	710	27	7	13	210	7
Nigrospora	-	7	13	230	25	7	13	170	8
Penicillium/Aspergillus types	2,100	27	270	3,400	86	38	210	2,500	87
Stachybotrys	-	7	13	350	3	7	13	290	5
Torula	-	7	13	200	12	7	13	150	12
Seldom found growing indoors**									
Ascospores	-	13	170	4,700	82	13	110	1,800	72
Basidiospores	330	27	500	21,000	96	13	210	6,700	94
Rusts	27	7	22	410	29	7	13	250	28
Smuts, Periconia, Myxomycetes	27	8	53	880	79	8	40	480	70
TOTAL SPORES/M3	5,837								

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

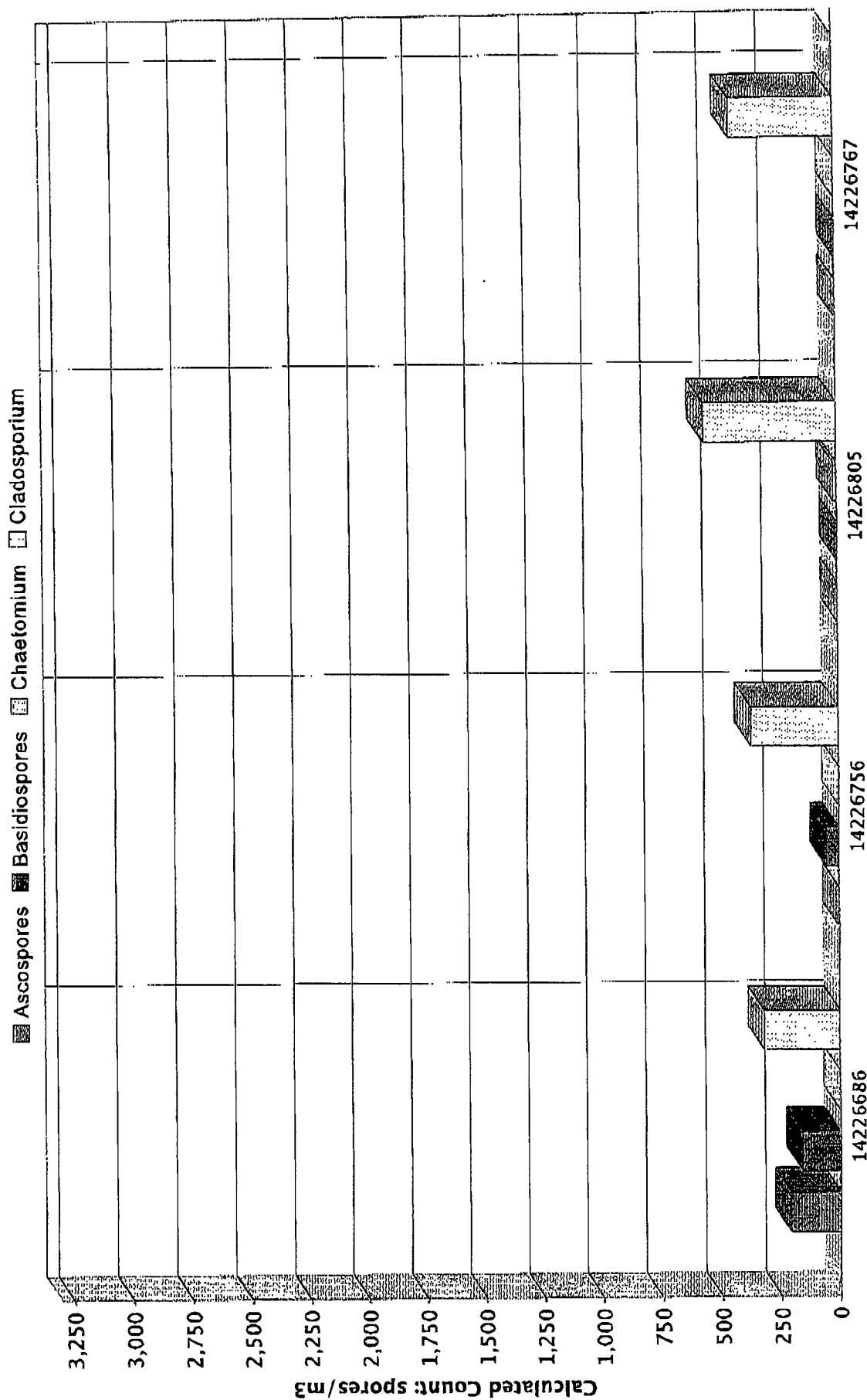
*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

EMLab P&K
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(650) 829-5800 Fax (650) 829-5852 www.emlab.com

10-21-2008: 102008-01

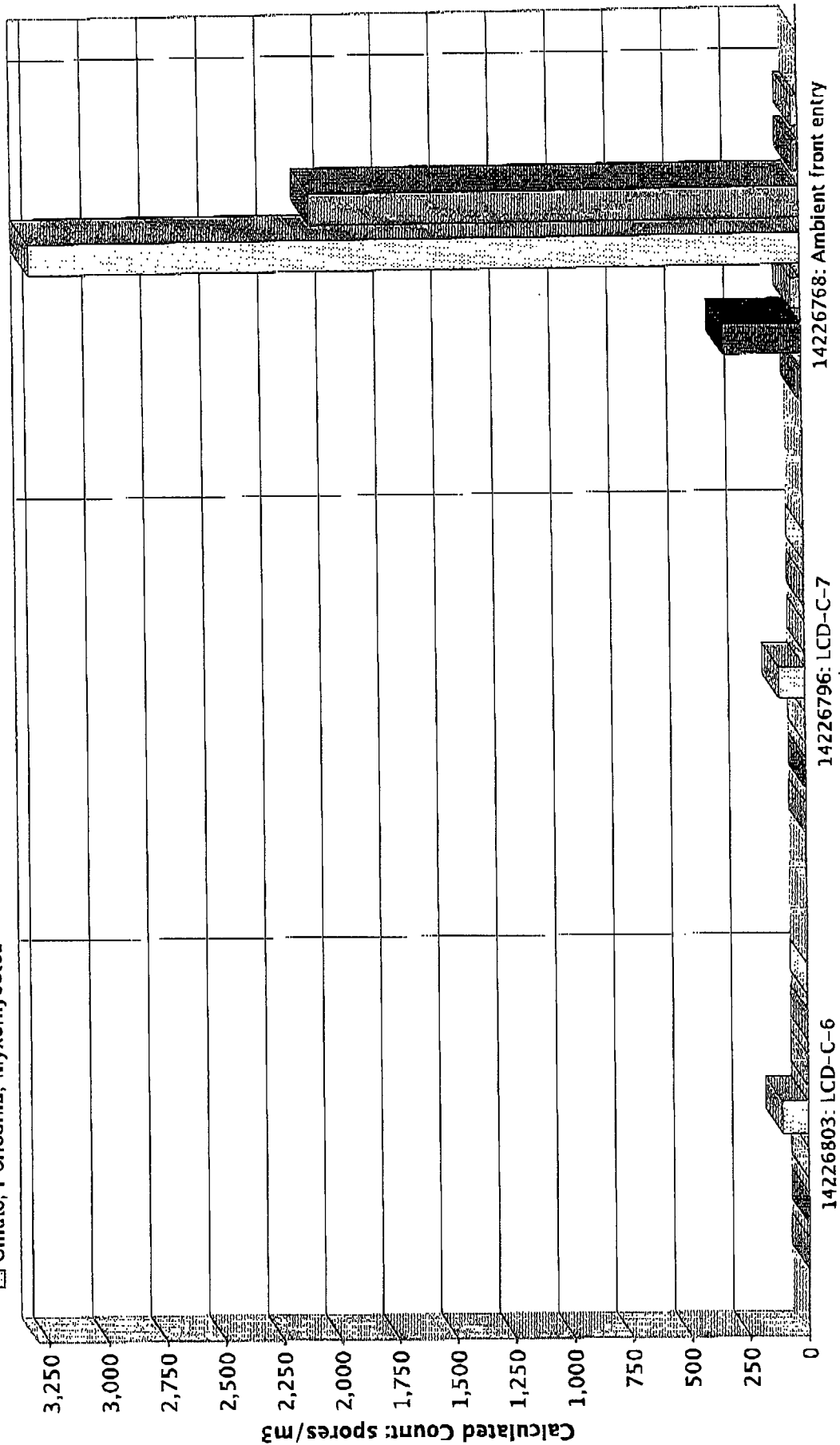
SPORE TRAP REPORT: NON-VIABLE METHODOLOGY**Comments:**

Note: Graphical output may understate the importance of certain "marker" genera.
TestAmerica Environmental Microbiology Laboratory, Inc.

EMLab ID: 479931, Page 1

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

☒ Alternaria
 ☒ Basidiospores
 ☒ Chaetomium
 ☒ Cladosporium
 ☒ Penicillium/Aspergillus types
 ☒ Rusts
 ☒ Smuts, Periconia, Myxomycetes



Comments:

Note: Graphical output may understate the importance of certain "marker" genera. TestAmerica Environmental Microbiology Laboratory, Inc.

MICROBIAL SPORE TRAP AIR SAMPLING RECORD

Page 1 of 1

BioMax Environmental
775 San Pablo Ave.
Pinole, CA 94564

www.biomaxenvironmental.com

Phone: (510) 724-3100
Fax: (510) 724-3145
biomaxenv@aol.com

Location: 22nd Floor LCD Areas BOE-450 N. Street	Client: DGS Project #: 102008-01
Date: 10/20/08 Collected by: M. A. Dolkale Signature: <i>[Signature]</i>	Laboratory: EM Labs Req. Turn Around: Same Day Analysis (circle): <u>Fungal</u> Particulate <u>ID/Quantification</u>

Sample Number	Time	Location/Desc	Temp / RH
14226686	0945	Parking Garage 3rd Level Perimeter	59° / 30%.
14226756	1050	LCD-C-11 Hallway (O.C.)	77° / 27%.
14226805	1105	LCD-C-11 Containment	78° / 28%.
14226767	1115	LCD-C-6 Hallway (O.C.)	77° / 27%.
14226802	1120	LCD-C-6 Containment	77° / 28%.
14226796	1138	LCD-C-7 Containment	78° / 28%.
14226768	1210	Ambient Front Entry	63° / 31%.
Total Sample Time (min): 5	Flow Rate (l/min): 15	Total Sample Volume (liters): 75	Ambient Conditions: Clear / Cool Air Cor



Please sign this form below acknowledging sample receipt and return executed form with lab reports. Fax, send, e-mail results to BioMax Environmental at (510) 724-3145 biomaxenv@aol.com
Other Instructions: (Same Day Rush)

Relinquished by: <i>[Signature]</i> Method of Transportation: FedEx Time/Date Sent: 4:30 10/20/08	Received By: <i>[Signature]</i> Time/Date Received: 10/21/08 9:25
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**EMLab P&K**

Report for:

Mr. Michael Polkaba
Blomax Environmental
775 San Pablo Ave.
Pinole, CA 94564

Regarding: Project: 101308-01
EML ID: 477518

Approved by:

Dates of Analysis:
Spore trap analysis: 10-15-2008

Lab Manager
Dr. Kamashwaran Ramanathan

Project SOPs: Spore trap analysis (I100000)

This coversheet is included with your report in order to comply with AIHA and ISO accreditation requirements.

For clarity, we report the number of significant digits as calculated; but, due to the nature of this type of biological data, the number of significant digits that is used for interpretation should generally be one or two. All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. Due to the nature of the analyses performed, field blank corrections of results is not a standard practice. The results relate only to the items tested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Document Number: 200091 - Revision Number: 5

EMLab P&K

1150 Bayhill Drive, Suite 100, San Bruno, CA 94066
(650) 829-5800 Fax (650) 829-5852 www.emlab.com

Client: Biomax Environmental
C/O: Mr. Michael Polkabila
Re: 101308-01

Date of Submittal: 10-13-2008
Date of Receipt: 10-14-2008
Date of Report: 10-15-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	14226771: Ambient 23rd floor west		14226772: Hallway 22nd floor at MRR		14226840: Men's RR LCD containment		14226728: 22 fountain Chae NW side		14224986: 22 LCD NE hallway	
Comments (see below)	None		None		None		None		None	
Lab ID-Version†:	2108093-1		2108094-1		2108095-1		2108096-1		2108097-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
<i>Alternaria</i>	3	40								
<i>Arthrrium</i>										
Ascospores*	6	320			1	53	1	53		
<i>Aureobasidium</i>										
Basidiospores*	24	1,300							1	53
<i>Bipolaris/Drechslera</i> group										
<i>Botrytis</i>										
<i>Chaetomium</i>	1	13								
<i>Cladosporium</i>	15	800			2	110	2	110	2	110
<i>Curvularia</i>										
<i>Epicoecum</i>										
<i>Fusarium</i>										
<i>Myrothecium</i>										
<i>Nigrospora</i>	1	13								
Other brown	1	13			1	13	1	13	1	13
Other colorless										
<i>Penicillium/Aspergillus</i> types†	5	270	1	53	1	53	3	160		
<i>Pithomyces</i>										
Rusts*										
Smuts*, <i>Periconia</i> , <i>Myxomycetes</i> *	5	67			1	13				
<i>Stachybotrys</i>										
<i>Stemphylium</i>										
<i>Torula</i>										
<i>Ulocladium</i>										
<i>Zygomycetes</i>										
Background debris (1-4+)††	3+		2+		2+		2+		2+	
Hyphal fragments/m3	40		< 13		13		< 13		< 13	
Pollen/m3	13		< 13		< 13		13		< 13	
Skin cells (1-4+)	< 1+		1+		2+		2+		1+	
Sample volume (liters)	75		75		75		75		75	
§ TOTAL SPORE/m3		2,800		53		240		330		170

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paeclomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for sample volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

‡ A "Version" greater than 1 indicates amended data.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

EMLab P&K

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Client: Biomax Environmental
C/O: Mr. Michael Polkabila
Re: 101308-01

Date of Submittal: 10-13-2008
Date of Receipt: 10-14-2008
Date of Report: 10-15-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	14226693: 22 LCD SW hall elevator lobby		14226592: 22 S hallway (O.C.)		14226775: 22 S center containment		14226829: 22 S. mail center 22B	
Comments (see below)	None		None		None		None	
Lab ID-Version†:	2108098-1		2108099-1		2108100-1		2108101-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
<i>Alternaria</i>								
<i>Arthrinium</i>								
Ascospores*								
<i>Aureobasidium</i>								
Basidiospores*			1	53				
<i>Bipolaris/Drechslera</i> group								
<i>Botrytis</i>								
<i>Chaetomium</i>								
<i>Cladosporium</i>					2	110		
<i>Curvularia</i>								
<i>Epicoccum</i>								
<i>Fusarium</i>								
<i>Myrothecium</i>								
<i>Nigrospora</i>								
Other brown					1	13		
Other colorless								
<i>Penicillium/Aspergillus</i> types†								
<i>Pithomyces</i>								
Rusts*					1	13		
Smuts*, <i>Periconia</i> , <i>Myxomycetes</i> *			1	13	1	13		
<i>Stachybotrys</i>								
<i>Stemphylium</i>								
<i>Torula</i>								
<i>Ulocladium</i>								
Zygomycetes								
Background debris (1-4+)††	2+		2+		2+		2+	
Hyphal fragments/m3	<13		<13		40		<13	
Pollen/m3	<13		<13		<13		<13	
Skin cells (1-4+)	1+		1+		1+		1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORE/m3		<13		67		150		<13

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Pascilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

†† Background debris indicates the amount of non-biological particulate matter present on the trace (dust in the air) and the resulting visibility for the analyst. It is rated from 1+ (low) to 4+ (high). Counts from areas with 4+ background debris should be regarded as minimal counts and may be higher than reported. It is important to account for samples volumes when evaluating dust levels.

The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

‡ A "Version" greater than 1 indicates amended data.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

EMLab ID: 477518, Page 2 of 3

EMLab P&K

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Client: Biomax Environmental
C/O: Mr. Michael Polkabila
Re: 101308-01

Date of Submittal: 10-13-2008
Date of Receipt: 10-14-2008
Date of Report: 10-15-2008

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

Location:	14226699: 22 S janitor's area		14226858: 22 SE corner area		14226788: 22 east hallway containment(aborted)		14226827: Ambient	
Comments (see below)	None		None		None		None	
Lab ID-Version†:	2108102-1		2108103-1		2108104-1		2108105-1	
	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3	raw ct.	spores/m3
<i>Alternaria</i>							9	120
<i>Arthrinium</i>								
Ascospores*	1	53					4	210
<i>Aureobasidium</i>								
Basidiospores*	1	53					14	750
<i>Bipolaris/Drechslera</i> group								
<i>Botrytis</i>							1	13
<i>Chaetomium</i>							1	13
<i>Cladosporium</i>					1	53	147	7,800
<i>Curvularia</i>							2	27
<i>Epicoccum</i>								
<i>Fusarium</i>								
<i>Nigrospora</i>								
Other brown	1	13						
<i>Penicillium/Aspergillus</i> types†							26	1,400
<i>Pithomyces</i>								
Rusts*								
Smuts*, <i>Periconia</i> , <i>Myxomycetes</i> *							9	120
<i>Stachybotrys</i>								
<i>Stemphylium</i>								
<i>Torula</i>								
<i>Ulocladium</i>								
Background debris (1-4+)††	3+		2+		2+		3+	
Hyphal fragments/m3	<13		<13		<13		130	
Pollen/m3	13		<13		<13		<13	
Skin cells (1-4+)	1+		1+		1+		<1+	
Sample volume (liters)	75		75		75		75	
§ TOTAL SPORE/m3		120		<13		53		10,000

Comments:

* Most of these spore types are not seen with culturable methods (Andersen sampling), although some may appear as non-sporulating fungi. Most of the basidiospores are "mushroom" spores while the rusts and smuts are plant pathogens.

† The spores of *Aspergillus* and *Penicillium* (and others such as *Acremonium*, *Paeecilomyces*) are small and round with very few distinguishing characteristics. They cannot be differentiated by non-viable sampling methods. Also, some species with very small spores are easily missed, and may be undercounted.

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The Limit of Detection is the product of a raw count of 1 and 100 divided by the percent read. The analytical sensitivity (counts/m3) is the product of the Limit of Detection and 1000 divided by the sample volume.

‡ A "Version" greater than 1 indicates amended data.

§ Total Spores/m3 has been rounded to two significant figures to reflect analytical precision.
TestAmerica Environmental Microbiology Laboratory, Inc.

EMLab P&K

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Client: Biomax Environmental
C/O: Mr. Michael Polkabila
Rc: 101308-01

Date of Submittal: 10-13-2008
Date of Receipt: 10-14-2008
Date of Report: 10-15-2008

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 14226771, Ambient 23rd floor west**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: October				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	40	7	40	450	62	7	27	210	58
Bipolaris/Drechslera group	-	7	13	210	23	7	13	120	13
Chaetomium	13	7	13	130	14	7	13	120	19
Cladosporium	800	53	800	12,000	97	53	640	6,400	98
Curvularia	-	7	27	710	27	7	13	210	7
Nigrospora	13	7	13	230	25	7	13	170	8
Other brown	13	7	13	120	35	7	13	80	37
Penicillium/Aspergillus types	270	27	270	3,400	86	38	210	2,500	87
Stachybotrys	-	7	13	350	3	7	13	290	5
Torula	-	7	13	200	12	7	13	150	12
Seldom found growing indoors**									
Ascospores	320	13	170	4,700	82	13	110	1,800	72
Basidiospores	1,300	27	500	21,000	96	13	210	6,700	94
Botrytis	-	7	22	290	10	7	19	200	20
Rusts	-	7	22	410	29	7	13	250	28
Smuts, Periconia, Myxomycetes	67	8	53	880	79	8	40	480	70
TOTAL SPORES/M3	2,836								

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

Interpretation of the data contained in this report is left to the client or the persons who conducted the field work. This report is provided for informational and comparative purposes only and should not be relied upon for any other purpose. "Typical outdoor data" are based on the results of the analysis of samples delivered to and analyzed by EMLab P&K and assumptions regarding the origins of those samples. Sampling techniques, contaminants infecting samples, unrepresentative samples and other similar or dissimilar factors may affect these results. In addition, EMLab P&K may not have received and tested a representative number of samples for every region or time period. EMLab P&K hereby disclaims any liability for any and all direct, indirect, punitive, incidental, special or consequential damages arising out of the use or interpretation of the data contained in, or any actions taken or omitted in reliance upon, this report.

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(650) 829-5800 Fax (650) 829-5852 www.emlab.com

Client: Biomax Environmental
C/O: Mr. Michael Polkabila
Re: 101308-01

Date of Submittal: 10-13-2008
Date of Receipt: 10-14-2008
Date of Report: 10-15-2008

MoldRANGE™: Extended Outdoor Comparison**Outdoor Location: 14226827, Ambient**

Fungi Identified	Outdoor data	Typical Outdoor Data by Date†				Typical Outdoor Data by Location‡			
		Month: October				State: CA			
	spores/m3	low	med	high	freq %	low	med	high	freq %
Generally able to grow indoors*									
Alternaria	120	7	40	450	62	7	27	210	58
Bipolaris/Drechslera group	-	7	13	210	23	7	13	120	13
Chaetomium	13	7	13	130	14	7	13	120	19
Cladosporium	7,800	53	800	12,000	97	53	640	6,400	98
Curvularia	27	7	27	710	27	7	13	210	7
Nigrospora	-	7	13	230	25	7	13	170	8
Other brown	-	7	13	120	35	7	13	80	37
Penicillium/Aspergillus types	1,400	27	270	3,400	86	38	210	2,500	87
Stachybotrys	-	7	13	350	3	7	13	290	5
Torula	-	7	13	200	12	7	13	150	12
Seldom found growing indoors**									
Ascospores	210	13	170	4,700	82	13	110	1,800	72
Basidiospores	750	27	500	21,000	96	13	210	6,700	94
Botrytis	13	7	22	290	10	7	19	200	20
Rusts	-	7	22	410	29	7	13	250	28
Smuts, Periconia, Myxomycetes	120	8	53	880	79	8	40	480	70
TOTAL SPORES/M3	10,453								

† The Typical Outdoor Data by Date represents the typical outdoor spore levels across North America for the month indicated. The last column represents the frequency of occurrence. The low, medium, and high values represent the 2.5, 50, and 97.5 percentile values of the spore type when it is detected. For example, if the frequency of occurrence is 63% and the low value is 53, it would mean that the given spore type is detected 63% of the time and, when detected, 2.5% of the time it is present in levels above the detection limit and below 53 spores/m3. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

‡ The Typical Outdoor Data by Location represents the typical outdoor spore levels for the region indicated for the entire year. As with the Typical Outdoor Data by Date, the four columns represent the frequency of occurrence and the typical low, medium, and high concentration values for the spore type indicated. These values are updated periodically, and if enough data is not available to make a statistically meaningful assessment, it is indicated with a dash.

*The spores in this category are generally capable of growing on wet building materials in addition to growing outdoors. Building related growth is dependent upon the fungal type, moisture level, type of material, and other factors. *Cladosporium* is one of the predominant spore types worldwide and is frequently present in high numbers. *Penicillium/Aspergillus* species colonize both outdoor and indoor wet surfaces rapidly and are very easily dispersed. Other genera are usually present in lesser numbers.

**These fungi are generally not found growing on wet building materials. For example, the rusts and smuts are obligate plant pathogens. However, in each group there are notable exceptions. For example, agents of wood decay are members of the basidiomycetes and high counts of a single morphological type of basidiospore on an inside sample should be considered significant.

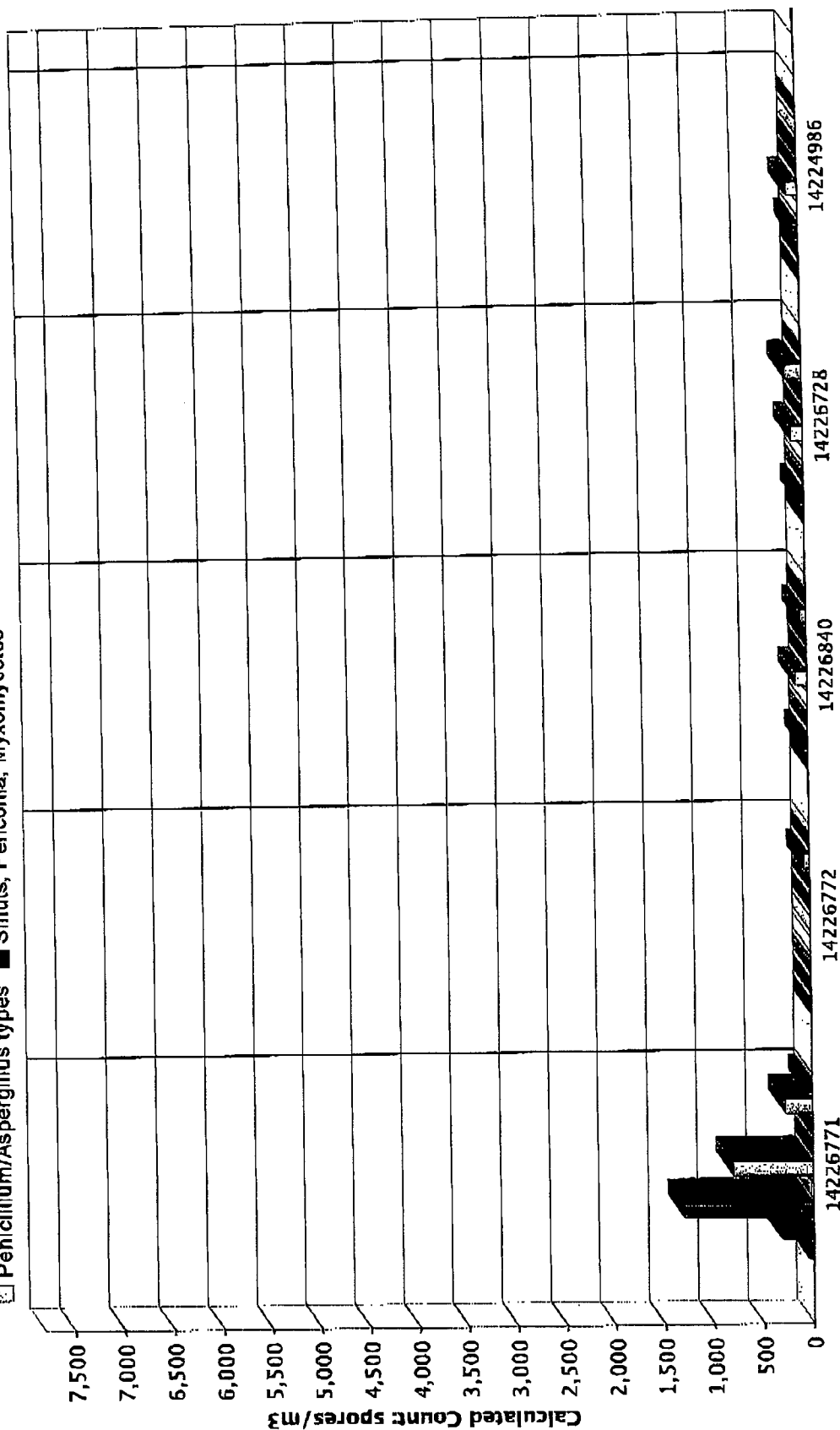
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 (650) 829-5800 Fax (650) 829-5852 www.emlab.com

10-15-2008: 101308-01

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

☒ Alternaria ☒ Ascospores ☒ Basidiospores ☐ Chaetomium ☐ Cladosporium ☒ Nigrospora ☒ Other brown
☒ Penicillium/Aspergillus types ☒ Smuts, Periconia, Myxomycetes



Comments:

Note: Graphical output may understate the importance of certain "marker" genera.
 TestAmerica Environmental Microbiology Laboratory, Inc.

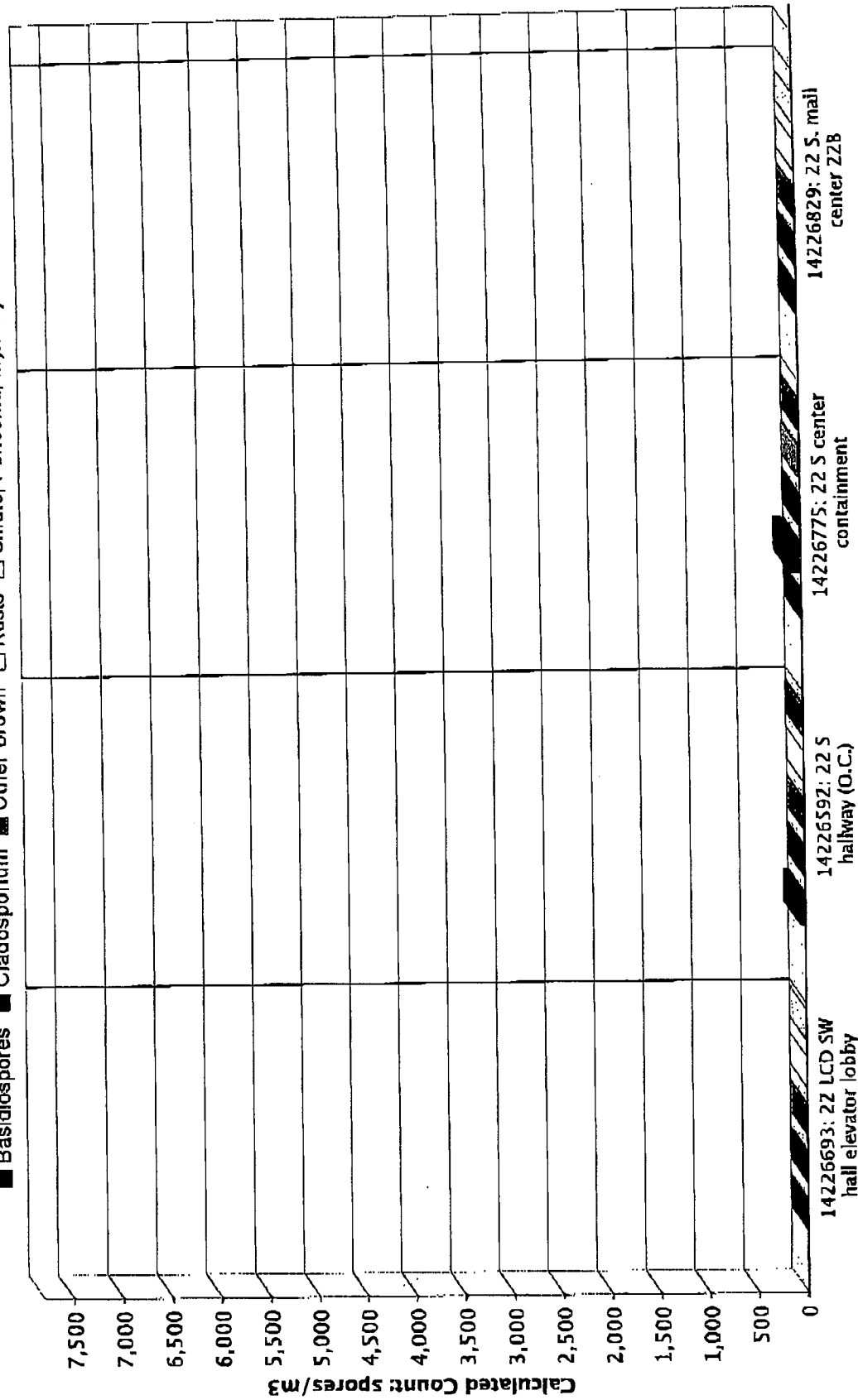
EMLab ID: 477518, Page 1

EMLab P&K
1150 Bayhill Drive, Suite 100, San Bruno, CA 94066
(650) 829-5800 Fax (650) 829-5852 www.emlab.com

10-15-2008: 101308-01

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

■ Basidiospores ■ Cladosporium ■ Other brown ■ Rusts ■ Smuts, Periconia, Myxomycetes

**Comments:**

Note: Graphical output may understate the importance of certain "marker" genera.
TestAmerica Environmental Microbiology Laboratory, Inc.

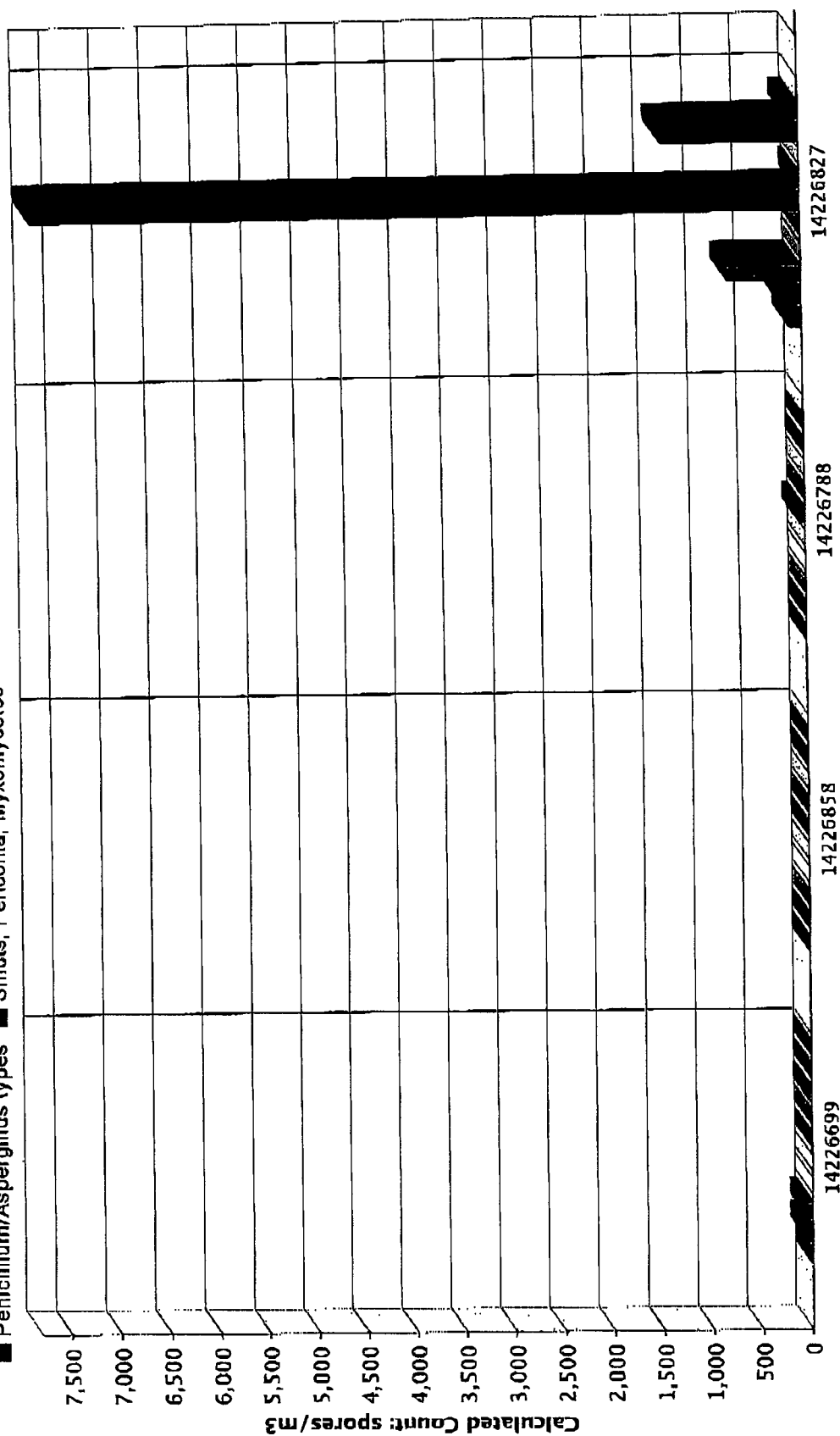
EMLab ID: 477518, Page 2

EMLab P&K
1150 Bayhill Drive, Suite 100, San Bruno, CA 94066
(650) 829-5800 Fax (650) 829-5852 www.emlab.com

10-15-2008: 101308-01

SPORE TRAP REPORT: NON-VIABLE METHODOLOGY

■ Alternaria ■ Ascospores ■ Basidiospores ■ Botrytis ■ Chaetomium ■ Cladosporium ■ Curvularia ■ Other brown
■ Penicillium/Aspergillus types ■ Smuts, Periconia, Myxomycetes



Comments:

Note: Graphical output may understate the importance of certain "marker" genera.
TestAmerica Environmental Microbiology Laboratory, Inc.

EMLab ID: 477518, Page 3

MICROBIAL SPORE TRAP AIR SAMPLING RECORD

Page 1 of 2

BioMax Environmental
775 San Pablo Ave.
Pinole, CA 94564

www.biomaxenvironmental.com

Phone: (510) 724-3100

Fax: (510) 724-3145

biomaxenv@aol.com

Location: 450 N Street
Sacramento, CA
22nd Floor LCD Site

Client: Dept Gen Services
(OGS)

Project #: 10R308-01

Date: 10/13/08

Laboratory: EMLabs

Collected by:

M. A. Polkolobits

Req. Turn Around: 24 HR

Signature:

[Signature]

Analysis (circle): Fungal /
Particulate

ID / Quantification.

Sample Number	Time	Location/Desc.	Temp / RH
1- 14226771	0740	Ambient 22nd Floor West	49° / 28%
2- 14226772	0755	Hallway 22nd Floor @ M.R. (O.S.)	72° / 23%
3- 14226840	0810	Men's RR LCD Contaminant @ N.W.	74° / 23%
4- 14226728	0825	22 Fountain Chase South Side	77° / 23%
5- 1424986	0835	22 LCD NE Hallway	77° / 22%
6- 14226693	0850	22 LCD SW Hall Elevator Lobby	81° / 23%
7- 14226592	0905	22 S Hallway (O.C.)	80° / 23%
8- 14226775	0915	22 S Center Contaminant	81° / 23%
9- 14226829	0920	22 S Mail Center 22B	83° / 24%
10- 14226699	0935	22 S Sanitary Area	82° / 24%
Total Sample Time (min):	Flow Rate (l/min):	Total Sample Volume (liters):	Ambient Conditions: Clear - Cold in Sun
5	15	75	Comments:

Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Fax, send, e-mail results to BioMax Environmental at (510) 724-3145 biomaxenv@aol.com
Other Instructions:

Relinquished by: <i>[Signature]</i>	Received By: <i>[Signature]</i>
Method of Transportation: <i>FEDEX</i>	Time/Date Received: <i>10/14/08 930</i>
Time/Date Sent: <i>4:30 10/13/08</i>	



MICROBIAL SPORE TRAP AIR SAMPLING RECORD

Page 2 of 2

BioMax Environmental
775 San Pablo Ave.
Pinole, CA 94564

www.biomaxenvironmental.com

Phone: (510) 724-3100
Fax: (510) 724-3145
biomaxenv@aol.com

Location: <u>450 N. Street</u> <u>22nd Floor LCD Area</u>	Client: <u>DGS</u>
Date: <u>10/13/08</u>	Project #: <u>101308-01</u>
Collected by: <u>M. A. Pollock</u>	Laboratory: <u>EnvLab</u>
Signature: <u>[Signature]</u>	Req. Turn Around: <u>24 hr</u>
	Analysis (circle): <u>Fungal</u>
	<u>Particulate</u>
	<u>ID / Quantification</u>

Sample Number	Time	Location/Desc	Temp / RH
11- 14226858	0945	22 - SE Corner Area	84°/24%
12- 14226788	1000	22 - East Hallway Contaminant	83°/23%
		"A Bordered" 9	
13- 14226827	1010	Ambient	51°/27%
Total Sample Time (min): <u>5</u>	Flow Rate (l/min): <u>15</u>	Total Sample Volume (liters): <u>75</u>	Ambient Conditions:
Comments:			

Please sign this form below acknowledging sample receipt and return executed form with laboratory reports. Fax, send, e-mail results to BioMax Environmental at (510) 724-3145 biomaxenv@aol.com
Other Instructions: _____

Relinquished by: <u>[Signature]</u>	Received By: <u>[Signature]</u>
Method of Transportation: <u>Box</u>	
Time/Date Sent: <u>4:30 10/13/08</u>	Time/Date Received: <u>10/14/08 930</u>



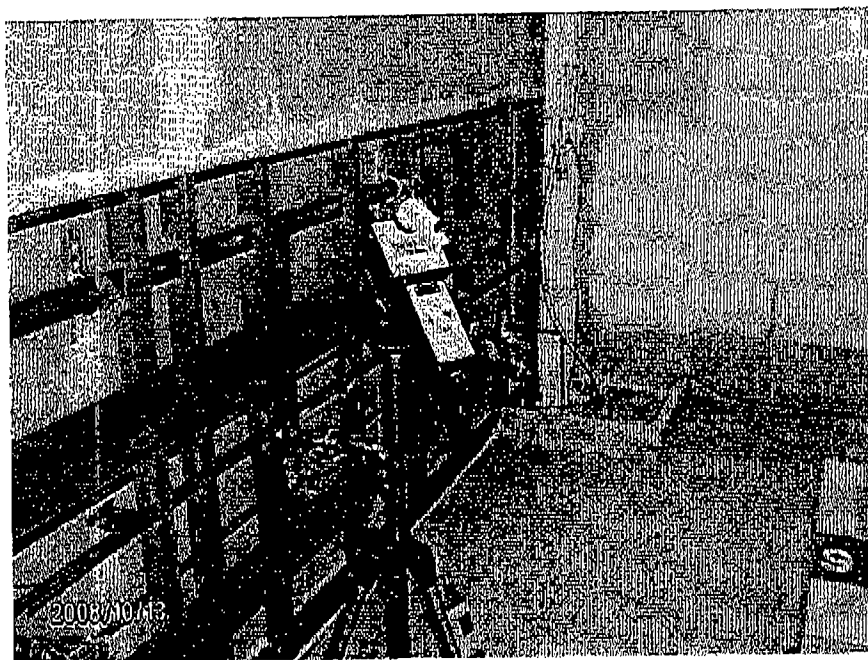
Attachment A: Digital Images
BOE 22nd Floor LCD Containment Clearances
Sacramento, CA

Page 1 of 7

[Click here for color photos](#)



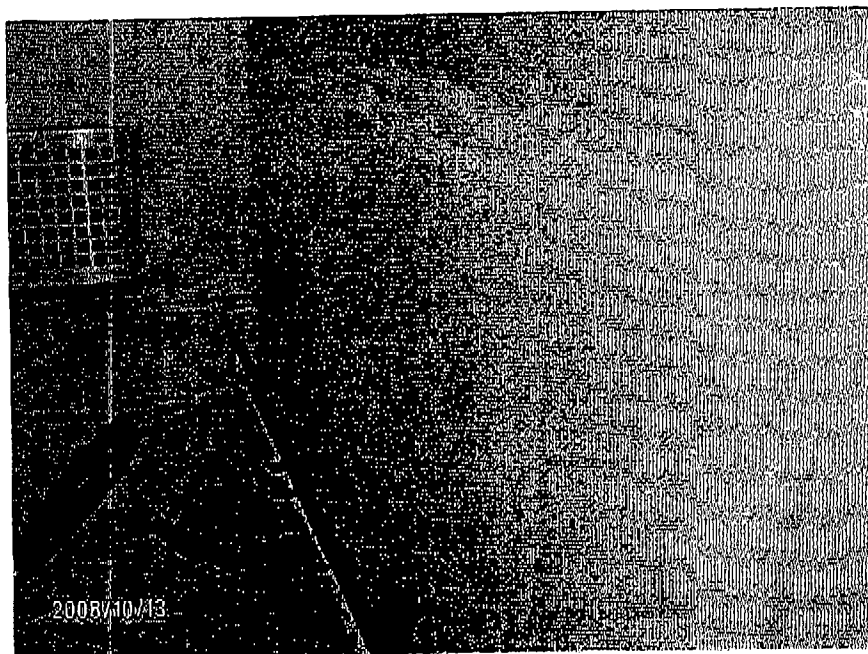
- 1) Image of ambient air sampling location at 23rd Floor western balcony of BOE building (Subject Building) located at 450 N Street, Sacramento.



- 2) Image of air sampling equipment located within interior of Men's Restroom containment at time of assessment. Note sheetrock removal at area formerly containing sink cabinets.

October 13th and 20th, 2008
BOE 22nd Floor LCD Containment Clearances
Sacramento, CA

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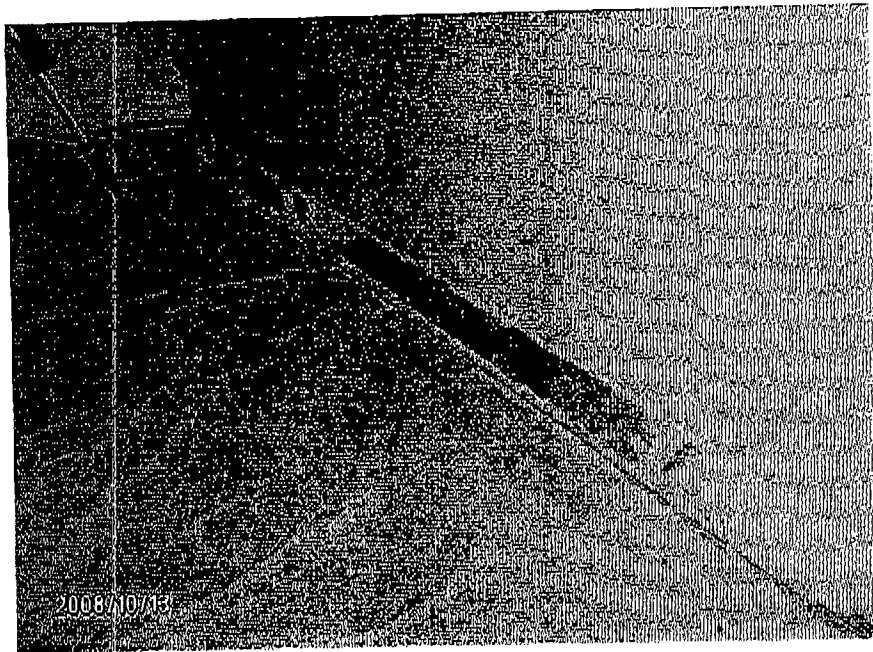
- 3) Image of reconstructed wall within interior of containment erected at center north hallway fountain chase location area at time of assessment.



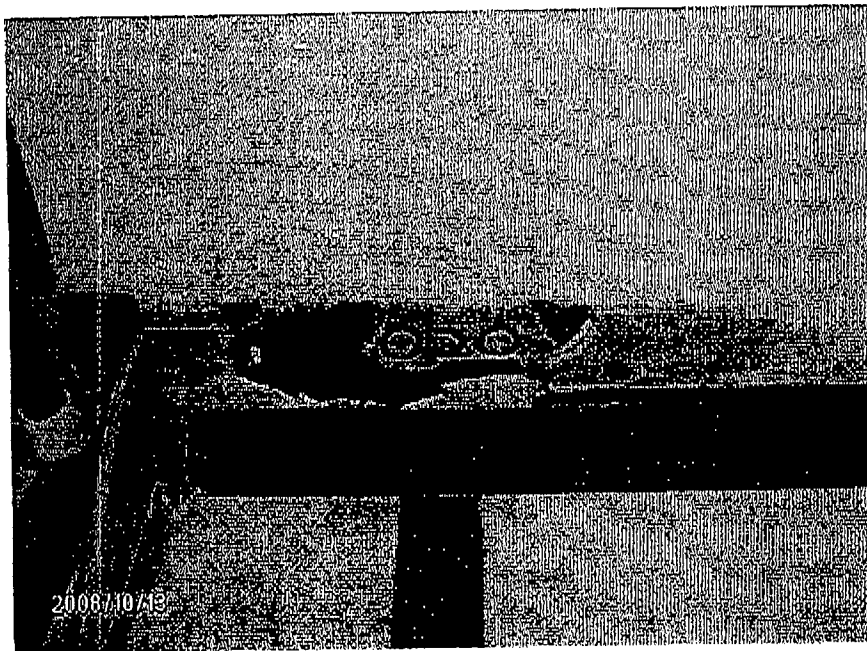
- 4) Image of reconstructed wallboard material within southeast hallway containment structures at time of assessment.

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BOE 22nd Floor LCD Containment Clearances
Sacramento, CA

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- 5) Image of baseboard removal and LCD sampling locations/ID within center containment of north hallway area.



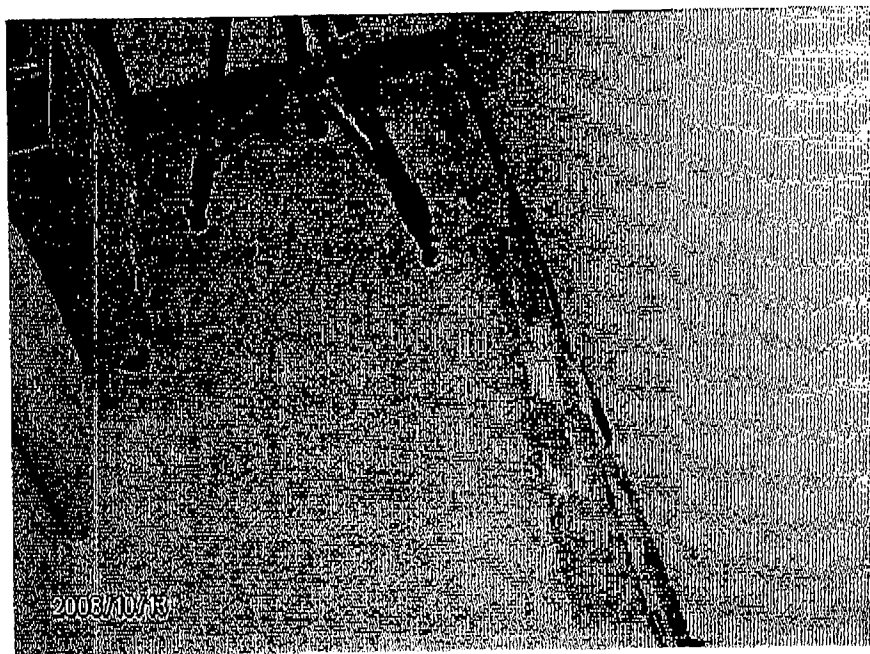
- 6) Close up image of completed LCD sampling/inspection area and repair within mail center containment barrier system at time of assessment.

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BOE 22nd Floor LCD Containment Clearances
Sacramento, CA

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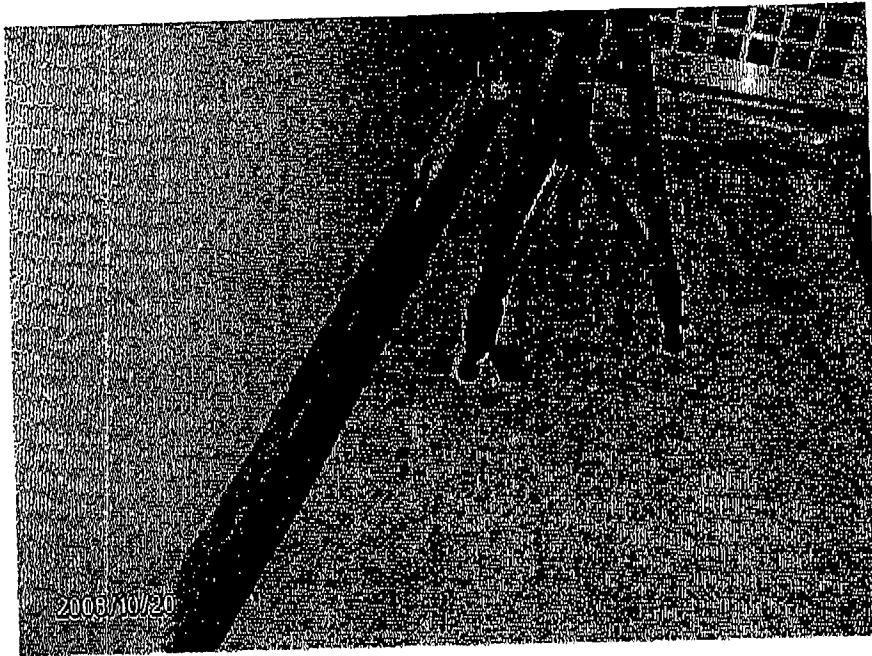
- 7) Image of air sampling equipment and repaired LCD inspection holes located within Janitor's closet room on south side of building.



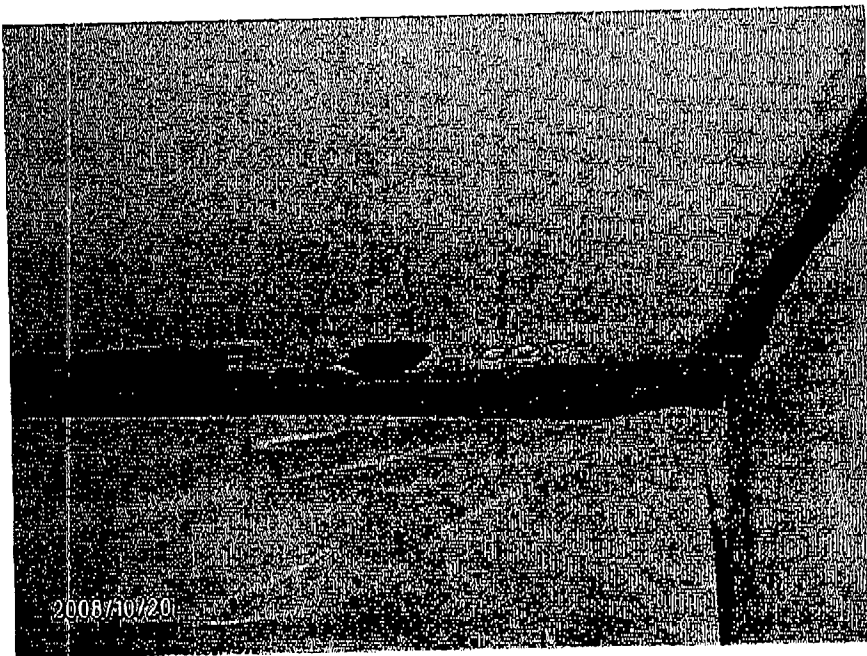
- 8) Image of air sampling equipment and repaired LCD inspection holes located within storage room on south west side of building.

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BOE 22nd Floor LCD Containment Clearances
Sacramento, CA

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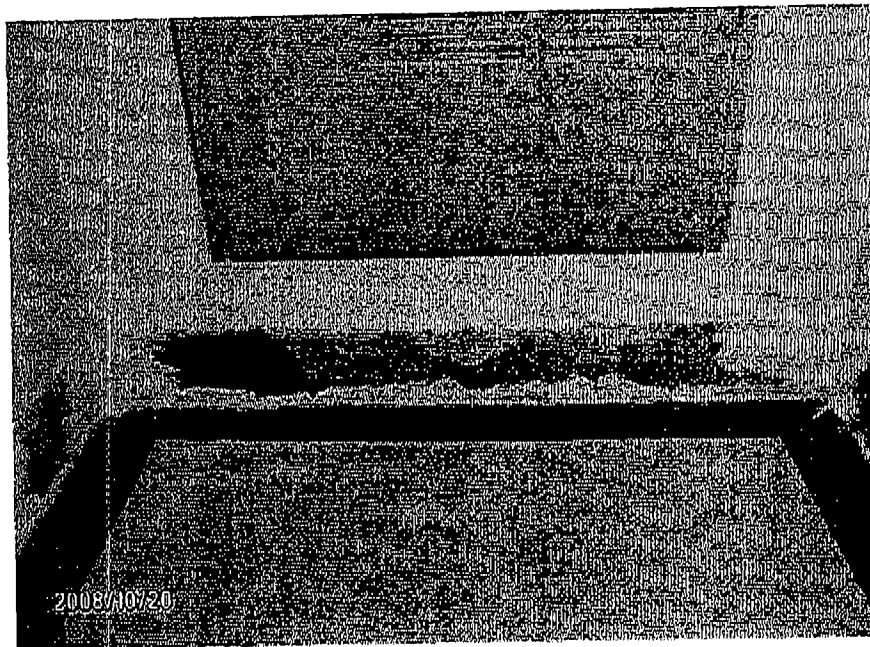
9) Image of air sampling equipment and repaired LCD inspection areas within LCD-C-11 containment at time of assessment.



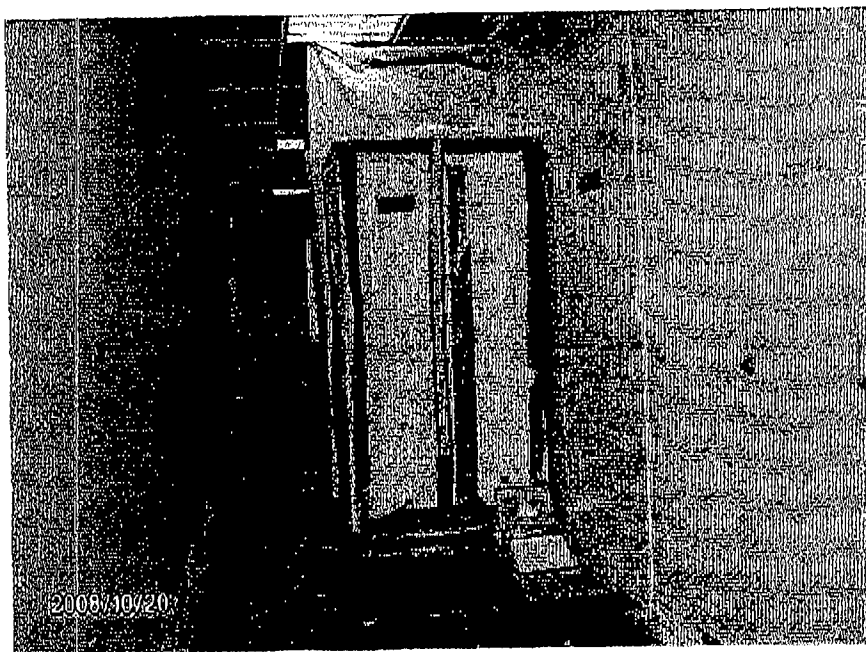
10) Image of air sampling equipment and repaired LCD inspection areas within LCD-C-6 containment at time of assessment.

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BOE 22nd Floor LCD Containment Clearances
Sacramento, CA

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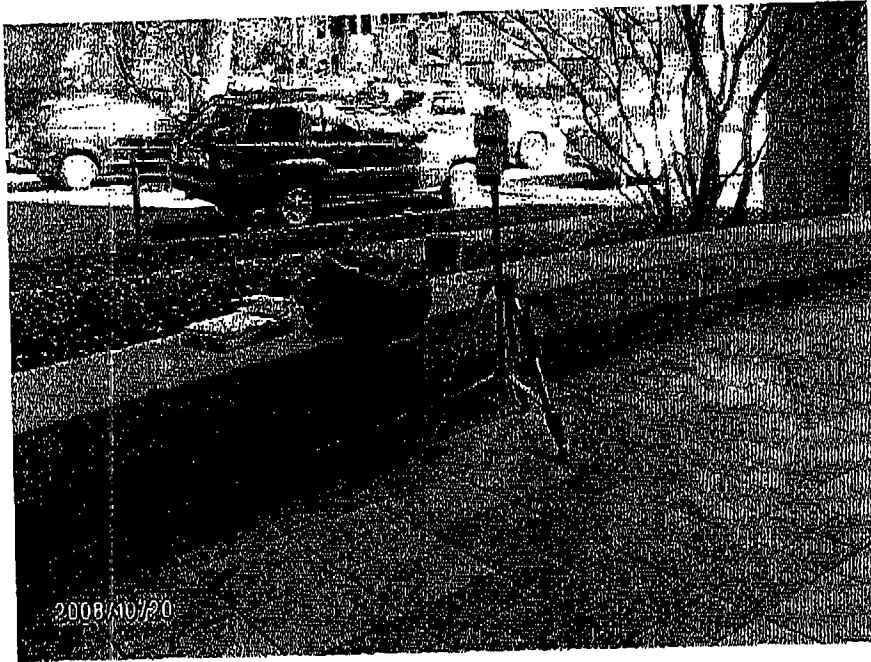
11) Image of repaired LCD inspection areas within LCD-C-7 containment at time of assessment.



12) Image of hallway containment entrance and structures of LCD-C-7 at time of assessment.

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October 13th and 20th, 2008
BOE 22nd Floor LCD Containment Clearances
Sacramento, CA



- 13) Image of ambient air sampling location at main entrance of BOE building performed at conclusion of interior clearance inspection sampling .